



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/967,240	09/28/2001	Sanu K. Mathew	884.448US1	6550
21186	7590 12/14/2005		EXAM	INER
SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH			DO, CHAT C	
1600 TCF TO	WER			
121 SOUTH EIGHT STREET		ART UNIT	PAPER NUMBER	
MINNEAPOL	IS, MN 55402		2193	

DATE MAILED: 12/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
Office Action Commence	09/967,240	MATHEW ET AL.	MATHEW ET AL.			
Office Action Summary	Examiner	Art Unit				
	Chat C. Do	2193				
The MAILING DATE of this commun Period for Reply	ication appears on the cover sheet	with the correspondence ac	ddress			
A SHORTENED STATUTORY PERIOD F WHICHEVER IS LONGER, FROM THE M - Extensions of time may be available under the provisions after SIX (6) MONTHS from the mailing date of this comm - If NO period for reply is specified above, the maximum st - Failure to reply within the set or extended period for reply Any reply received by the Office later than three months earned patent term adjustment. See 37 CFR 1.704(b).	MAILING DATE OF THIS COMMUN is of 37 CFR 1.136(a). In no event, however, may a munication. tatutory period will apply and will expire SIX (6) MO y will, by statute, cause the application to become	NICATION. a reply be timely filed ONTHS from the mailing date of this of ABANDONED (35 U.S.C. § 133).	, ,			
Status						
1) Responsive to communication(s) file	ed on <u>06 September 2005 and 05 (</u>	October 2005.				
	2b)⊠ This action is non-final.					
3) Since this application is in condition	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practi	ice under <i>Ex parte Quayle</i> , 1935 C.	.D. 11, 453 O.G. 213.				
Disposition of Claims						
4)⊠ Claim(s) <u>1 and 3-37</u> is/are pending i	in the application.					
4a) Of the above claim(s) is/a	re withdrawn from consideration.					
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1 and 3-37</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restrict	ction and/or election requirement.					
Application Papers						
9) ☐ The specification is objected to by th	e Examiner.					
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.						
Applicant may not request that any obje	ction to the drawing(s) be held in abey	ance. See 37 CFR 1.85(a).				
Replacement drawing sheet(s) including	·	• • •	` '			
11)☐ The oath or declaration is objected to	o by the Examiner. Note the attach	ed Office Action or form P	TO-152.			
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim a) All b) Some * c) None of:	for foreign priority under 35 U.S.C.	§ 119(a)-(d) or (f).				
1. Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No						
Copies of the certified copies	of the priority documents have bee	n received in this National	l Stage			
• •	onal Bureau (PCT Rule 17.2(a)).					
* See the attached detailed Office action	on for a list of the certified copies no	ot received.				
Attachment(s)	∧ □	V C				
 Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (F 		v Summary (PTO-413) o(s)/Mail Date				
3) Information Disclosure Statement(s) (PTO-1449 or Paper No(s)/Mail Date		f Informal Patent Application (PT	O-152)			

DETAILED ACTION

- 1. This communication is responsive to Amendment filed 09/06/2005.
- 2. Claims 1 and 3-37 are pending in this application. Claims 1, 8, 22, 28, and 33 are independent claims. In Amendment, claim 2 is cancelled. This Office Action is made non-final after a RCE filed 10/05/2005.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
- 4. Claim 1 is rejected under 35 U.S.C. 102(a) as being anticipated by Siers et al. (U.S. 6,269,386).

Re claim 1, Siers et al. disclose in Figures 1-6 an adder to sum two binary numbers (e.g. abstract and col. 1 lines 50-68), comprising: a first circuit (e.g. Figure 1 with all P6 circuits) having a plurality of carry-merge stages connected in a series (e.g. operate as series dependent as seen in Figure 2), the first circuit adapted to generate a group of carries (e.g. all the output from P6), the group of carries including a final carry generated by a final stage of the series (e.g. C_{out}^{i} in Figure 3 and col. 2 lines 32-47), a first carry generated by a first stage of the series (e.g. 116 from 102 to 110) and a second carry

Application/Control Number: 09/967,240

Art Unit: 2193

generated by one of the plurality of stages of the series located between the first and final stages of the series (e.g. output of 108); a second circuit (e.g. 116 for generating carry) connected to the first circuit and having a plurality of stages (e.g. all P6s circuits), the second circuit connected to receive the final carry and the second carry and adapted to produce a pair of conditional carry (e.g. 116 connects C_{in} and output of 108), the second circuit adapted to generate additional carries missing from the group of carries to provide one carry for every group of a predetermined number of bits of the two binary numbers (e.g. C_{out} of to C_{out} wherein n can be a predetermined number of bits as 4 bits per group); at least one sum generator (e.g. all CSS circuits in Figure 1) connected to the first circuit (e.g. all P6s) and the second circuit (e.g. 116 circuit) and connected to receive the first carry (e.g. outputs of all P6s) and one of the pair of conditional carry, the sum generator adapted to generate a pair of conditional sums (e.g. Figure 5); and at least one device adapted to select between the pair of conditional sums in response to one of the group of carries (e.g. Figure 5 through 502).

Page 3

Allowable Subject Matter

- 5. Claims 8-37 are allowed.
- 6. Claims 3-7 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Application/Control Number: 09/967,240

Art Unit: 2193

Response to Arguments

Page 4

7. Applicant's arguments with respect to claim 1 have been considered but are moot in view

of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Chat C. Do whose telephone number is (571) 272-3721. The

examiner can normally be reached on M => F from 7:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Chaki Kakali can be reached on (571) 272-3719. The fax phone number for the

organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Chat C. Do

Examiner

Art Unit 2193

December 6, 2005

KAKALI CHAKI

SUPERVI

TECHNOLE.